WE CLAIM:

1. A system for enabling encryption/authentication on a data network telephony system comprising:

a data network to provide data connectivity for a plurality of data communications channels using data transport protocols;

5   first and second data network telephones connected to the data network, each data network telephone operable to communicate a voice signal as voice-over-data packets on a voice-over-data channel, the voice over data channel being one of the plurality of data communications channels on the data network, the data network telephones operable to convert voice-over-data packets communicated on the voice-over-data channel to voice

10 signals; and

a first portable information device, the first portable information device registered to the first data network telephone and comprising a first graphical user interface and a first data network telephone interface, the first graphical user interface operable to accept and display PID data, the first data network telephone interface operable to communicate

15 PID data to and from the first data network telephone; and

a second portable information device, the second portable information device registered to the second data network telephone and comprising a second graphical user interface and a second data network telephone interface, the second graphical user interface operable to accept and display PID data, the second data network telephone

20 interface operable to communicate PID data to and from the second data network telephone,

wherein the first and second portable information devices exchange PID data over a private network, wherein the first and second portable information devices transmit the PID data to the first and second data network telephones, wherein the PID data comprises

25 encryption/authentication data, and wherein the first and second data network telephones are each operable to communicate encrypted data packets on an encrypted data channel, the encrypted data channel being one of the plurality of data communications channels on the data network, the data network telephones operable to encrypt and authenticate data packets using the PID data transmitted by the first and second portable information

30 devices to the first and second data network telephones.

2.   The system of Claim 1 wherein:

        at least a first and second user communicate on the voice-over-data

channel and the encrypted data channel, each user identified by a user identifier

that includes a unique sequence of alpha numeric elements

5

3.   The system of Claim 2 wherein each data network telephone includes a device

identifier that corresponds to the user identifier.

4.   The system of Claim 3 wherein the device identifiers include Internet Protocol

(IP) addresses.

5.   The system of Claim 3 wherein the user identifiers include Session Initiation

Protocol (SIP) addresses.

6.   The system of Claim 3 wherein the user identifiers include E.164 telephone

numbers.

7.   The system of Claim 1 further comprising:

        a network telephony user database connected to the data network to store a

user identifier and a telephone identifier corresponding to the user identifier for

each of a plurality of users, wherein:

5   the user identifier includes a first sequence of alphanumeric

                elements that identify a corresponding user;

                        the telephone identifier includes a second sequence of

                alphanumeric elements that identifies a corresponding data

                network telephone; and

10   a network telephony connection server operable to receive a request

                message from the first data network telephone to initiate the voice over data

channel and the encrypted data channel with the second data network telephone, and to send a response message in response to the request message.

8.   The system of Claim 7, wherein the response and request messages are communicated by the network telephony connection server in accordance with the Session Initiation Protocol (SIP).

9.   The system of Claim 7, wherein the response and request messages are communicated by the network telephony connection server in accordance with the H.323 Protocol.

10.   The system of Claim 7 wherein the response and request messages are communicated by the network telephony connection server in accordance with the MEGACO protocol.

10.   The system of Claim 7 wherein the response and request messages are communicated by the network telephony connection server in accordance with the MGCP protocol.

11.   The system of Claim 7 wherein:
       the request message includes a callee user identifier; and
       wherein the network telephony connection server determines the telephone identifier for the callee user identifier and includes the telephone identifier in the response message.

12.   The system of Claim 7 wherein:
       the request message includes a callee user identifier; and
       wherein the network telephony connection server determines the telephone identifier for the callee identified in the callee user identifier and sends the response message to the callee at the telephone idenfier.